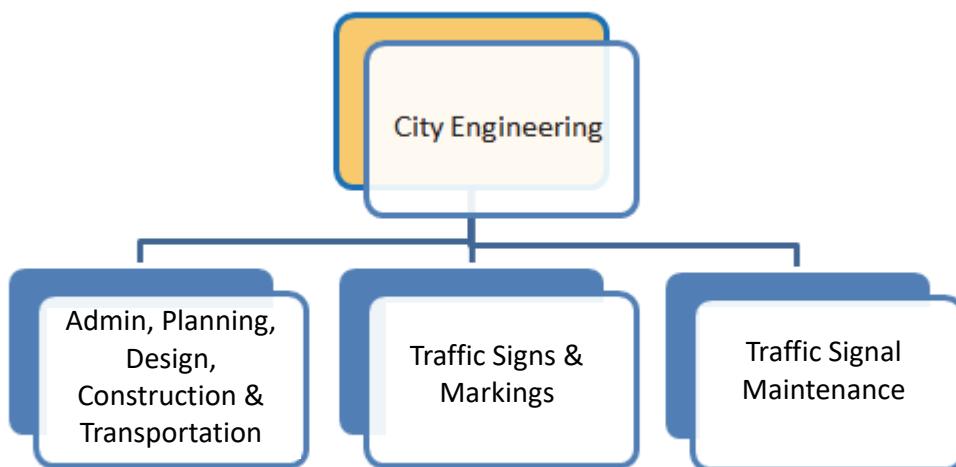


# CITY ENGINEERING

## Mission Statement

Improving the quality of life and safety for Memphis citizens by providing exceptional engineering services through civil design, land development, and traffic operations.

## Organization Structure



## Services

The Division of Engineering provides planning, design and construction administration to constantly improve and expand the City's infrastructure. The Division designs and manages the construction of all the City's capital projects. Engineering staff reviews all private development proposals to ensure the required public improvements are included.

## Operating Budget

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
<b>EXPENDITURES</b>				
Personnel Services	\$ 7,833,922	\$ 8,056,959	\$ 8,148,251	\$ 8,251,985
Materials and Supplies	3,413,775	4,086,197	4,102,967	4,570,108
Capital Outlay	66,568	85,000	85,000	85,000
Expense Recovery	(3,480,566)	(4,185,300)	(4,185,300)	(4,185,300)
Service Charges	82,509	41,000	90,000	75,000
<b>Total Expenditures</b>	<b>\$ 7,916,208</b>	<b>\$ 8,083,856</b>	<b>\$ 8,240,918</b>	<b>\$ 8,796,793</b>
<b>Total Revenues</b>	<b>\$ (779,891)</b>	<b>\$ (1,120,763)</b>	<b>\$ (2,761,738)</b>	<b>\$ (1,755,763)</b>
<b>NET EXPENDITURES</b>	<b>\$ 7,136,317</b>	<b>\$ 6,963,093</b>	<b>\$ 5,479,180</b>	<b>\$ 7,041,030</b>
<b>Authorized Complement</b>	<b>116</b>			

## Performance Highlights

The City Engineering Division is a key aspect of improving the quality of life for all citizens of Memphis. Engineering is responsible for ensuring that projects are properly planned, designed, and constructed for Memphians in a timely, cost-efficient manner. The division has a variety of departments that work to improve and expand the City's infrastructure, manage the design and construction of the City's capital projects, and review private development proposals to ensure the required standards, codes, and safety procedures are being followed for public safety. This year, Engineering has continued its service to Memphis through public outreach initiatives which concentrate on the youth, public safety, good government, jobs, and neighborhoods.

### Traffic Engineering

Traffic Engineering is a key element in the safety and quality of life within the Memphis city limits. The department designs, operates, and provides maintenance supervision services for all permanent and temporary traffic control devices within the public rights-of-way. This year, Traffic Engineering continued its service by completing the following:

- Improved the traffic signal at the intersection of Poplar at Cleveland to allow protected left turn movements from all directions
- Improved the traffic signal at the intersection of Macon at Whitten to allow protected left turn movements from the EB and SB directions
- Installed rapid flashing beacons at the intersection of Front at Gayoso to improve pedestrian safety near the AutoZone Headquarters
- Improved the traffic signal at the intersection of Austin Peay at New Covington Pike to allow protected left turn movements from all directions
- Installed a new traffic signal at the intersection of Georgia at Riverside

- Installed a new traffic signal at the intersection of Holmes at Tchulahoma
- Installed flashing beacons on Cordova Rd near Cordova Club Rd. to improve safety for motorists traveling through the roadway curve in this area
- Completely modernized (i.e. re-constructed) the traffic signal at the intersection of Adams at Danny Thomas, Chelsea at Thomas, and Washington at Danny Thomas
- Established the first railroad quiet zones in the City of Memphis along sections of Southern Ave
- Completed RR safety improvements near the intersection of Shelby Dr. at Tuggle and Person at Castalia
- Coordinated with Shelby County to complete a project that extended the City of Memphis ITS Network on Jackson from Hollywood to Whales
- Coordinated with Shelby County to complete projects that extended the City of Memphis ITS Networks as follows:
  - Winchester from Germantown Rd. to Ave. of Commerce
  - Elvis Presley from Holmes to Shelby Dr.
  - Stage Rd. from Jackson to Covington Pike
  - Third St. from Mitchell to MLK
- Installed 498 Curb Ramps

### Bike-Ped Highlights

- National Recognition: This year, Memphis was rated the 32<sup>nd</sup> most bicycle-friendly city in the country, an impressive jump from 64<sup>th</sup> place just two years ago. Memphis was also rated the “Quickest Accelerating” City nationally in terms of bicycle culture and infrastructure
- Shared Mobility: We facilitated the successful launch of bike share and scooter share in Memphis, collectively bringing nearly 2,000 shared mobility vehicles to Memphis
- Neighborhood Collaboration: Leveraging private grant funds, we worked with residents in South Memphis to install temporary traffic calming devices that were novel for Memphis and one for the U.S. Volunteers from the neighborhood, as well as students and teachers from Ida B. Wells Academy, helped install the project. Over the one-month demonstration, we collected data and public input, which was used to guide development of permanent improvements now under design
- Bike to Work: We led a City-wide effort to encourage bicycling to work on May 17<sup>th</sup>, National Bike to Work Day. Over 300 residents participated in the day’s programming which was made possible mostly through private donations and sponsorships

### Signs and Markings

The Signs and Markings Department installs and maintains proper signage and pavement markings for both vehicular traffic and pedestrians. They aide in providing safety measures and requirements that are necessary for Memphians to operate safely within the city limits. This year the department completed the following:

- Installed 218 high-visibility crosswalks thermoplastic
- Lane miles re-striped – 1,358.99
- Traffic signs replaced – 15,271
- Designed and made ADA signs for city buildings
- Replaced Raised Pavement Markers (RPMs) – 1,229

- Started sign cleanup projects – Vollintine, Mclean, N. Parkway, Summer, A.W. Willis & Park Ave.

### Traffic Signal Maintenance

Traffic Signal Maintenance is responsible for maintaining the following which makes up the City of Memphis Traffic Signal System:

- Signalized intersections: 788
- Flashers (intersections, crosswalks, fire stations): 84
- School flashers: 167
- Hawk pedestrian crossing signals: 3
- RRFB controlled crosswalks: 23 (46 Units)
- Bluetooth detection units: 78

These safety measures aide in keeping the pedestrians, motorists and goods moving by maintaining existing traffic signals and installing new signals at intersections throughout the City. Through the first eleven months of the year, Traffic Signal Maintenance completed the following:

- Planned maintenance actions: 650
- Count down pedestrian signal installations: 28
- Total maintenance actions (maintenance ticket generated): 6317
- Underground locate actions performed (maintenance ticket generated): 2441

### Survey

This year, the Survey Service Center has completed over 75 survey projects, including drainage studies, design surveys, sewer as-built plans, drainage as-built plans, and construction staking projects. They have established 40 new benchmarks using a consulting firm to do the field work with the oversite remaining with the Survey Manager. They have created a Benchmark GIS System that currently has over 250 benchmarks. When completed, these will be available online. They have participated in the Salvation Army Angel Tree program and the MIFA Food Bank Drive.

### Sewer

The Sewer department provides quality and timely sewer design services, plan review, capacity analysis, and maintains accurate sewer plan records so that sanitary sewer services can be provided to new developments. These duties provide an important base for the growth and development of new neighborhoods and businesses.

- One sewer extension project has been bid this calendar year and it is constructed
- One project is designed in-house while waiting for easements to be bid
- Two sewer relocation projects due to conflict with the TDOT projects have been designed and submitted to TDOT. These projects will be bid by TDOT (Move- in to TDOT project). One of them is designed in house and the other one designed by an engineering firm
- The department prepared plan and profile (in-house) for a “20” Nonconnah Force Main Relocation at Cherry Road that is under construction by City environmental maintenance

- The department reviewed ten sanitary sewer easement projects for SARP10 and the Administrator of Environmental Construction. Eight of these are approved by City Engineering and have been sent to the real estate department for acquisition
- The department reviewed eighteen TDOT projects during this year for a conflict with the existing sewer

## Land Development

The Land Development Department (LDD) is responsible for insuring that all private development within the City integrates properly with the City's infrastructure, including roads, sewer, and storm water drainage. This effort results in numerous plan reviews being performed by the LDD. Submitted plans are marked up and/or commented on and returned to the developer for revision electronically via a "SharePoint" cloud. The LDD experienced a 100%+ increase in plan reviews this year, with over 1,200 reviews being performed, compared to 542 reviews being performed in FY18.

The LDD is also leading the efforts in establishing a Small Cell 5G network throughout the City. This effort involves reviewing and approving hundreds of permits to install 5G Nodes throughout the City. By the end of FY19, the LDD will have approved permits for over 200 5G Nodes in the City.

LDD is participating in the City's Urban Fellow Program again this year. A sophomore mechanical engineer student at Mississippi State University, is assigned to the Land Development Department. He has been tasked with creating an electronic tracking and filing system for all closed out public improvement contracts, street cut permits, and monitoring well permits. The Urban Fellow will also be entering all approved, private, fiber optic cable installations within the City's ROW into the Information System's GIS platform.

## Building Design and Construction

Building Design and Construction (BD&C) is responsible for providing quality engineering and architectural services in support of City facilities building projects. BD&C project managers manage CIP projects for City facilities in a timely and cost-effective manner. These projects play a huge part in the development and growth of Memphis. From playgrounds and libraries that cater to the youth in the City, to police stations that manage public safety, each project adds an important piece to our service to Memphis citizens.

Along with managing City projects, the department contributed to Junior Achievement, Feed the Need, United Way, and Angel Tree. BD&C also collaborated with mapping and hosted one of their summer youth interns. The intern worked in the BD&C flat file room, filing and organizing the City's building plans.

## Mapping Department

The Mapping Department has over a million infrastructure related engineering records – which are maintained and researched by the department. To support the initiatives of community service, the Mapping department has contributed the following this year:

**Special Projects Research with GIS Analysis, Support, and Maps:** The Mapping Department provided GIS analysis and mapping support for several high-profile projects, (e.g., Loews Hotel; New Brooks Museum; De-Annexations; Sam Cooper Blvd.; Convention Center Expansion project; etc.) including researching, scanning, and sending thousands of mapping records.

**Customer Service Information Requests:** During 2019, the Mapping staff has researched and answered more than a thousand "External & Internal" infrastructure related information requests (e.g., Sanitary Sewers; Street Plan & Profiles; Grading & Drainage; Off-Street Drainage; ROW; SAC; Easements; Unrecorded Plats; etc.).

Community Involvement / Charity Work: Our GIS Technical Sr. Analyst represents the Engineering Mapping Department in the “Mentor Memphis Program” by mentoring his 3rd young man from Youth Villages. The Sr. Analyst was nominated for the Grizzlies Mentor Memphis – “Mentor of the Year Award” and was a top 3 finalist for the Memphis Metro Region. The Sr. Analyst continues to be recognized as the most active and dedicated City of Memphis Government mentor. Mapping staff members also actively participate in each of the various City fund-raising initiatives (e.g., Operation Feed; United Way; Angel Tree Program; etc.).

Summer Youth Interns: For the past 12 years, the Mapping Department continues to represent the Engineering Division by taking the leadership role of working with the MAPS Summer Youth Internship Program. This 6-week initiative includes mentoring; daily supervision; designating work assignments; time sheets & payroll; and external field trips (e.g., Sewer Treatment Plant; Real Time Crime Center; Signs & Markings; etc.).

### **Construction Inspections**

Construction Inspections work on the City’s behalf to protect the public’s interest by inspecting all construction activities within public rights-of-way and easements. This year, the Department completed the following objectives:

- 437 curb ramps have been constructed to meet current ADA requirements
- 27 of 30 streets have been milled, resurfaced, and striped
- Tchulahoma street improvement was completed and on budget
- 1046 Mayor’s citizen service center requests were investigated and responded to
- All 20 inspections were certified as field technicians by TDOT
- All 20 inspections were certified as CEI (Construction, Engineering, Inspection) by TDOT
- All 20 inspectors were certified in confined space by the City
- 9 railroad crossing were repaired and surfaced
- 584 sidewalk notices were mailed to property owners
- 17 property owners qualified under sidewalk assistance and have had their sidewalk repaired
- 170 property owners were cited to environmental court. The city has received 50 judgments to repair sidewalks and place tax liens against owners. Ninety-nine (99) other property owners repaired sidewalk after being court ordered

### **Civil Engineering**

Civil Engineering is responsible for providing Memphis with timely and quality engineering services in the design of Capital Improvement Program for roadway, drain, and bridge construction projects and the review of private developments to protect the safety of the public. This year, civil engineering has focused on several aspects of service. The following are projects, youth initiatives, and improvement plans that were facilitated by Civil Engineering:

**Poplar Avenue Widening Project** - This project was initiated to widen the Poplar Avenue corridor, providing an additional westbound travel lanes, from Interstate 240 to the intersection of South Yates Road. This widening project, in conjunction with the Tennessee Department of Transportation MemFix4 bridge repair project, which expanded the bridge to accommodate a third travel lane, has the goal of mitigating congestion and reducing travel times throughout this heavily traveled corridor in Memphis. The Civil Design Department completed the design and executed the construction of Phase I and Phase II of this three-phase project. Using

only internal forces, the department was able to compress and expedite a typical multi-year design process into an approximate 8-month schedule. A coordinated construction effort by the contractor allowed for a minimal impact to the traveling public and completed construction in less than 6 months. The Civil Design Department was able to complete Phase I and Phase II design and construction in less than 12 months. This widened section has already shown reductions in congestion. Completion of Phase III of this project is currently under design and construction is estimated to be completed within 1 year.

**Gayoso Bayou at Wendy's Box Culvert Replacement Project** - This project was to replace an existing drainage structure consisting of brick retaining walls with a concrete slab and beam superstructure. The structure ran under the Wendy's parking lot and the location of the building constrained the working area, so Wendy's agreed to shut down for 120 days beginning August 1<sup>st</sup> to complete the construction. There were several unknowns which complicated the project as the existing brick walls were over 100 years old and there were no original construction plans on record to document wall thickness and foundation configuration. The Contractor, Bell and Associates, was required to shore up the walls to prevent movement and ensure that the Wendy's building would not be damaged. There were also utilities to the building which had to removed and replaced after construction. Bell and Associates completed the project by the end of November, successfully meeting contract requirements.

**Brook Road Over Days Creek Bridge Repair** - This bridge was damaged by a fire in 2004. The fire occurred under the west approach span and severely damaged the beam, slab, and the pile bent substructure. Because of the damage, the bridge was rated in poor condition and a load limit was placed on the bridge as a precautionary measure. A federal STP grant was applied for and accepted which, under federal guidelines, is an 80/20 matching funds grant. The bridge is located next to the MATA terminal which will always be required in the phase of construction to keep Brooks Road open to traffic. The Contractor, Dement Construction, completed the project in a successful manner. Problems during the construction arose when it was discovered that the fire caused more damage than originally anticipated. This increased costs and lengthened the project time, but we were able to obtain the additional funds from the State and successfully complete the project.

**Civil Engineering Interns** - This spring and summer, the Civil Design Department hosted several interns. They received three Urban Fellowship Interns who are college students studying engineering or related degrees, and one high school student who will soon be attending UT Martin to study mechanical engineering. These interns were very helpful as the Civil Design Department went through major renovations this year which reduced office space and required transitioning the filing system from mainly paper files to electronic. The interns also helped move equipment around during renovations as they transitioned into their new office. Finally, they were also able to go on several field trips to look at sites during construction and how projects are built.

**Orleans Drainage Improvements** - This project was designed and constructed to mitigate street and resident flooding that had been occurring over a period. Survey performed the field data collection and through analysis and design, construction was completed in about 1 to 2 months.

**Jack Carley Causeway Drainage Improvements** - This project was designed and constructed to replace a drainage system by re-routing to improve drainage conveyance and to repair roadway settlement in a highly trafficked area. The survey was performed and the data were used in the design of the project. The project was constructed and completed in about one month. It has been 3 months since the construction and there have been no signs of any roadway settlement or flooding complaints.

## Issues & Trends

Engineering is committed to serve Memphis by providing exceptional engineering services and aiding in initiatives that improve the quality of life for all Memphians. Each year, the Engineering Division supports the City's efforts to combat poverty and be a beacon of hope within our growing community; by helping with organizations like United Way, Angel Tree, Feed the Need, and Junior Achievement. The division will continue these efforts of community involvement and provide services that help to grow and improve our community.

## Key Performance Indicators

Performance Indicator	FY18 Actual	FY19 Goal	FY19 Actual*	FY20 Goal	Category
<b>ADMINISTRATION</b>					
Review and return land development plan submittals to developers within 10 working days of submission	72%	85%	90%	92%	Government
Number of plan reviews performed monthly	43	45	101	100	Government
Cumulative average time to execute all construction contracts after the bid opening	122	110	130	120	Government
Review private development sewer drawings within 7 calendar days	67%	80%	90%	92%	Government
Cumulative number of drainage design projects initiated annually	5	10	8	10	Government
Cumulative number of drainage design projects completed annually	0	2	5	3	Government
Cumulative number of months until a decision is reached (approval/rejection) on speed hump requests	11	6	22	12	Government
Cumulative number of months between approval of a speed hump request and installation	0	5	8.9	6	Government
<b>SIGNS AND MARKINGS</b>					
% of curb ramps in the city that are ADA compliant	65%	69%	66%	69%	Public Safety
Number of traffic signs repaired/installed annually	11,739	12,000	16,517	13,000	Public Safety
% of city streets re-striped annually	42%	50%	57%	57%	Public Safety
<b>SIGNAL MAINTENANCE</b>					
Complete preventative maintenance on 100% of traffic signals (998) annually	57%	60%	65%	65%	Public Safety
% of down/malfunctioning traffic signals responded to within 24 hours	100%	100%	100%	100%	Public Safety
% of signal systems installed/modified within 2 months of assignment	22%	50%	67%	67%	Public Safety
% of intersections with pedestrian countdown signals	15%	18%	20%	22%	Public Safety

\* Some figures are approximate. In these cases, the reporting for FY19 was not complete before production of the budget book.

## City Engineering • Division Detail

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
<b>PERSONNEL SERVICES</b>				
Full-Time Salaries	\$ 4,864,704	\$ 6,457,382	\$ 5,430,871	\$ 6,671,744
Holiday Salary Full Time	292,359	0	310,208	0
Vacation Leave	421,358	0	488,655	0
Bonus Leave	48,424	0	46,955	0
Sick Leave	318,951	0	261,912	0
Overtime	387,354	141,200	188,408	141,200
Out of Rank Pay	15,290	35,757	35,757	35,757
Longevity Pay	6,497	0	6,734	0
Shift Differential	10,246	12,360	12,360	12,360
PTO Final Pay	43,340	91,000	91,000	101,000
Pension	322,338	244,159	401,754	382,432
Social Security	5,872	0	4,759	0
Pension ADC	631,593	832,403	674,808	592,922
Group Life Insurance	14,595	17,054	17,168	16,818
Unemployment	8,560	8,720	8,720	8,720
Medicare	89,217	97,526	97,526	95,887
Long Term Disability	20,405	18,234	18,234	18,782
Health Insurance - Value PPO	7,734	0	0	0
Health Insurance - Premier	487,457	461,544	461,544	445,152
Benefits Adjustments	0	63,540	0	11,768
Health Insurance-Local Plus Plan	356,438	378,780	378,780	477,144
Salaries - Part-Time/Temporary	94,341	164,800	167,117	207,800
On-the-job injury	30,422	32,500	41,473	32,500
Bonus Pay	21,900	0	0	0
Expense Recovery - Personnel	(665,471)	(1,000,000)	(996,492)	(1,000,000)
<b>Total Personnel Services</b>	<b>\$ 7,833,922</b>	<b>\$ 8,056,959</b>	<b>\$ 8,148,251</b>	<b>\$ 8,251,985</b>
<b>MATERIALS AND SUPPLIES</b>				
Document Reproduction - City	\$ 4,913	\$ 0	\$ 0	\$ 0
City Storeroom Supplies	3,523	4,640	4,640	4,640
City Shop Charges	241,964	245,713	247,392	250,627
City Shop Fuel	106,187	118,999	118,999	121,974
City Computer Svc Equipment	5,435	7,230	7,230	37,230
City Telephone/Communications	0	23,310	0	0
Printing - Outside	72	820	793	820
Supplies - Outside	25,994	37,858	37,858	36,958
Hand Tools	18,118	11,000	11,000	11,000
Clothing	25,806	30,533	30,600	30,533
Household Supplies	41	0	0	0
Safety Equipment	11,188	11,365	11,365	11,365

City Engineering • Division Detail *(continued)*

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
Drafting/Photo Supplies	299	1,000	1,000	0
Outside Postage	57	1,575	1,661	1,575
Paints Oils & Glass	557,190	400,000	400,000	400,000
Steel & Iron Products	108,723	150,000	150,000	150,000
Pipe Fittings & Castings	5,447	7,000	7,000	7,000
Lime Cement & Gravel	815	1,000	1,118	1,000
Materials and Supplies	168,085	324,047	324,047	324,047
Maintenance Traffic Signal System	14,634	200,000	200,000	240,000
Outside Vehicle Repair	3,114	4,840	4,840	4,840
Outside Equipment Repair/Maintenance	58,993	57,029	57,029	55,029
Internal Repairs and Maintenance	182,950	228,694	230,392	228,694
Advertising/Publication	3,673	1,000	1,000	1,000
Outside Phone/Communications	22,425	10,500	25,070	32,310
Janitorial Services	6,267	8,000	8,330	8,000
Seminars/Training/Education	25,122	41,711	41,711	37,911
Misc Professional Services	944,146	980,650	993,300	1,280,650
Travel Expense	4,750	3,750	4,919	4,750
Unreported Travel	(444)	400	238	400
Mileage	142,232	188,351	188,351	188,351
Utilities	194,072	180,608	180,608	195,608
Insurance	63,895	51,296	57,454	55,818
Claims	2,700	300,000	77,479	300,000
Lawsuits	0	23,630	0	23,630
Dues/Memberships/Periodicals	6,550	13,648	15,276	13,348
Radio Trunking Lease	0	2,000	2,000	2,000
Misc Services and Charges	172,142	410,000	521,848	535,000
Urban Art Maintenance	17,720	35,000	35,000	35,000
Equipment Rental	326,100	0	163,050	0
Expense Recovery - M & S	(61,122)	(31,000)	(59,632)	(61,000)
<b>Total Materials and Supplies</b>	<b>\$ 3,413,775</b>	<b>\$ 4,086,197</b>	<b>\$ 4,102,967</b>	<b>\$ 4,570,108</b>

**CAPITAL OUTLAY**

Prod/Constr/Maint Equipment	\$ 37,805	\$ 44,000	\$ 44,000	\$ 44,000
Equipment	28,763	41,000	41,000	41,000
<b>Total Capital Outlay</b>	<b>\$ 66,568</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>

**EXPENSE RECOVERY**

Expense Recovery - State Street Aid	\$ (3,480,566)	\$ (4,185,300)	\$ (4,185,300)	\$ (4,185,300)
<b>Total Expense Recovery</b>	<b>\$ (3,480,566)</b>	<b>\$ (4,185,300)</b>	<b>\$ (4,185,300)</b>	<b>\$ (4,185,300)</b>

City Engineering • Division Detail *(continued)*

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
<b>SERVICE CHARGES</b>				
Credit Card Fees - Expense	\$ 82,509	\$ 41,000	\$ 90,000	\$ 75,000
<b>Total Service Charges</b>	<b>\$ 82,509</b>	<b>\$ 41,000</b>	<b>\$ 90,000</b>	<b>\$ 75,000</b>
<b>TOTAL EXPENDITURES</b>	<b>\$ 7,916,208</b>	<b>\$ 8,083,856</b>	<b>\$ 8,240,918</b>	<b>\$ 8,796,793</b>
<b>LOCAL TAXES</b>				
Fiber Optic Franchise Fees	\$ 0	\$ 350,000	\$ 1,500,000	\$ 800,000
<b>Total Local Taxes</b>	<b>\$ 0</b>	<b>\$ 350,000</b>	<b>\$ 1,500,000</b>	<b>\$ 800,000</b>
<b>LICENSES AND PERMITS</b>				
Sidewalk Permit Fees	\$ 54,620	\$ 88,000	\$ 60,000	\$ 88,000
<b>Total Licenses and Permits</b>	<b>\$ 54,620</b>	<b>\$ 88,000</b>	<b>\$ 60,000</b>	<b>\$ 88,000</b>
<b>CHARGES FOR SERVICES</b>				
Subdivision Plan Inspection Fee	\$ 186,046	\$ 90,000	\$ 170,000	\$ 170,000
Street Cut Inspection Fee	190,012	250,000	250,000	250,000
Traffic Signals	217,297	200,000	200,000	200,000
Parking Meters	303	0	0	0
Signs-Loading Zones	34,745	15,000	37,500	15,000
Arc Lights	3,478	4,000	4,000	4,000
Rental Fees	0	0	200,000	200,000
MLG&W Rent	2,200	2,400	2,400	2,400
Subdivision Development Fees	13	0	5,475	0
<b>Total Charges for Services</b>	<b>\$ 634,094</b>	<b>\$ 561,400</b>	<b>\$ 869,375</b>	<b>\$ 841,400</b>
<b>STATE GRANTS</b>				
St TN Highway Maint Grant	\$ 62,687	\$ 95,000	\$ 0	\$ 0
<b>Total State Grants</b>	<b>\$ 62,687</b>	<b>\$ 95,000</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>OTHER REVENUES</b>				
Sale Of Reports	\$ 6,739	\$ 26,363	\$ 26,363	\$ 26,363
Subdivision Sidewalk Fees	21,237	0	6,000	0
Recovery Of Prior Year Expense	514	0	0	0
<b>Total Other Revenues</b>	<b>\$ 28,490</b>	<b>\$ 26,363</b>	<b>\$ 32,363</b>	<b>\$ 26,363</b>
<b>TRANSFERS IN</b>				
Oper Tfr In - State Street Aid	\$ 0	\$ 0	\$ 300,000	\$ 0
<b>Total Transfers In</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 300,000</b>	<b>\$ 0</b>
<b>TOTAL REVENUES</b>	<b>\$ (779,891)</b>	<b>\$ (1,120,763)</b>	<b>\$ (2,761,738)</b>	<b>\$ (1,755,763)</b>
<b>NET EXPENDITURES</b>	<b>\$ 7,136,317</b>	<b>\$ 6,963,093</b>	<b>\$ 5,479,180</b>	<b>\$ 7,041,030</b>

## Administration

Provides timely and quality engineering services in the design of public works projects and the review of private developments to protect the safety of the public.

### Operating Budget

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
<b>EXPENDITURES</b>				
Personnel Services	\$ 3,513,745	\$ 3,666,230	\$ 3,719,422	\$ 3,745,272
Materials and Supplies	1,703,965	1,997,291	1,994,616	2,445,441
Capital Outlay	28,763	41,000	41,000	41,000
Expense Recovery	(905,869)	(4,185,300)	(4,185,300)	(4,185,300)
Service Charges	82,509	41,000	90,000	75,000
<b>Total Expenditures</b>	<b>\$ 4,423,114</b>	<b>\$ 1,560,221</b>	<b>\$ 1,659,738</b>	<b>\$ 2,121,413</b>
<b>Total Revenues</b>	<b>\$ (716,672)</b>	<b>\$ (1,025,763)</b>	<b>\$ (2,460,093)</b>	<b>\$ (1,755,763)</b>
<b>NET EXPENDITURES</b>	<b>\$ 3,706,442</b>	<b>\$ 534,458</b>	<b>\$ (800,356)</b>	<b>\$ 365,649</b>

Authorized Complement

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## Signs & Markings

Provides safety and quality of life improvements within the City of Memphis by installing and maintaining proper signage and pavement markings for both pedestrian and vehicular traffic.

### Operating Budget

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
<b>EXPENDITURES</b>				
Personnel Services	\$ 2,064,758	\$ 2,182,626	\$ 2,180,008	\$ 2,223,540
Materials and Supplies	940,266	1,014,923	1,045,910	992,033
Capital Outlay	14,758	22,000	22,000	22,000
Expense Recovery	(1,283,092)	0	0	0
<b>Total Expenditures</b>	<b>\$ 1,736,690</b>	<b>\$ 3,219,549</b>	<b>\$ 3,247,918</b>	<b>\$ 3,237,574</b>
<b>Total Revenues</b>	<b>\$ (62,687)</b>	<b>\$ (95,000)</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>NET EXPENDITURES</b>	<b>\$ 1,674,003</b>	<b>\$ 3,124,549</b>	<b>\$ 3,247,918</b>	<b>\$ 3,237,574</b>

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Authorized Complement

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## Signal Maintenance

Traffic Signal Maintenance works to increase the safety of pedestrians, motorists, and goods movement by maintaining existing traffic signals and installing new signals at intersections throughout the City of Memphis.

### Operating Budget

Category	FY 2018 Actual	FY 2019 Adopted	FY 2019 Forecast	FY 2020 Adopted
<b>EXPENDITURES</b>				
Personnel Services	\$ 2,255,419	\$ 2,208,103	\$ 2,248,821	\$ 2,283,173
Materials and Supplies	769,544	1,073,983	1,062,441	1,132,634
Capital Outlay	23,047	22,000	22,000	22,000
Expense Recovery	(1,291,606)	0	0	0
<b>Total Expenditures</b>	<b>\$ 1,756,404</b>	<b>\$ 3,304,086</b>	<b>\$ 3,333,263</b>	<b>\$ 3,437,807</b>
<b>Total Revenues</b>	<b>\$ (532)</b>	<b>\$ 0</b>	<b>\$ (301,645)</b>	<b>\$ 0</b>
<b>NET EXPENDITURES</b>	<b>\$ 1,755,872</b>	<b>\$ 3,304,086</b>	<b>\$ 3,031,618</b>	<b>\$ 3,437,807</b>
<b>Authorized Complement</b>				<b>28</b>

